

Description

The 2133 is one of several industrial grade CPU cards offered by Octagon Systems in a PC/104 package. It provides Pentium® performance for embedded applications that require a rugged design in a highly integrated package. This tiny powerhouse is compatible with DOS, Windows CE/NT®, QNX®, and other PC-compatible operating systems. In addition to the processing power, the card includes 4 MB of surface mount DRAM that is field expandable to 64 MB. The 2133 has one SSD socket that supports M-Systems DiskOnChip® 2000 flash drives. DiskOnChip devices are available from 2–288 MB and provide full hard disk read/write compatibility. This card is well suited for mobile, industrial, and control applications. It includes all the features you expect from embedded PC processors.

Features

| PC MOTHERBOARD FUNCTIONS: | |
|---------------------------|---|
| CPU: | .AMD 5x86–133 MHz |
| Chipset: | .OPTI |
| Memory: | .4 MB DRAM on-card; expandable up to 64 MB |
| | via DIMM module |
| Power | |
| management: | .Suspend/resume operation via SMI input and software; Wake up though various interrupts, including COM2 serial port |
| DMA internal: | .7 DMA channels; 8237 compatible; |
| | AT interrupts 15 channels; 8259 compatible |
| Counter timer | .3 programmable counter/timers; 8245 compatible |
| Real time clock: | .AT style clock/calendar is fully Y2K compliant; |
| | external 3.6V battery required |
| SETUP memory: | .System SETUP information stored in EEPROM; |
| | Up to 1536 Bytes of EEPROM available to user for |

ON-CARD PERIPHERAL FUNCTIONS:

512K flash

special data storage

BIOS:.....Phoenix AT compatible with industrial extensions in

| Serial: | Two RS-232 ports, 16C550 compatible, |
|-----------------|--|
| | 300 to 115 Kbaud |
| | Supports all PC serial handshake lines |
| | Ports are ESD protected up to \pm 6KV |
| Parallel: | IEEE-1284 enhanced bidirectional parallel port |
| | Supports ECP and EPP modes |
| | Floppy drive mode |
| | Backdrive and ESD protected |
| | Data lines provide 24 mA drive |
| Keyboard | |
| interface: | Compatible with AT style keyboards |
| Speaker: | Speaker interface will drive 8–50 ohm speakers |
| SSD: | M-Systems DiskOnChip® 2000 compatible; |
| : | sizes 2–288 MB; 512K SRAM support; requires external |
| | 3.6V battery for data retention |
| Watchdog timer: | Software enabled & strobed |
| | Default time 1.6 seconds (typical) |



All you'd expect from embedded PC processors:

Two standard serial ports, enhanced parallel port, AT keyboard support, battery-backed, real time clock, 5V only operation, watchdog timer, and EEPROM storage for SETUP configuration.

TECHNICAL SPECIFICATIONS

Size:PC/104 standard: 3.775" x 3.55" x 1.0", Including

stack-through connector

Bus:.....8/16-bit PC/104 ISA Bus

Power:.....5V ± 0.25 V, 500 to 950 mA typical, depending upon

power management mode

Environment:.....-40° to 85° C operating

-55° to 85° C non-operating RH 5% to 95%, non-condensing

6g vibration 40g shock

Weight: 3.5 oz. (No DOC or DIMM modules on card)

CE Compliant:Class A MTBF:>10 years

Ordering Information

Order #5515......2133 PC/104 CPU, includes 2133 User's Manual & utilities on CD ROM.

ACCESSORIES

Order #2746......VTC-9F, serial cable, 9-pin female, 6-ft. Order #2472......VTC-9M, serial cable, 9-pin male, 6-ft. Order #4809.......FCA-12, floppy drive cable, 12-in. Order #4808......PCA-36, Centronics printer cable, 36-in. Order #1237......VTC-5/IBM, DB-25 printer cable, 6-ft. Order #3909......2010 LCD display/keyboard interface

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